Electricity on the Farm

A Monthly Magazine for the Progressive Rural Family

JULY, 1932

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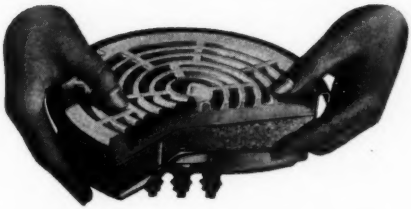
Monarch "Hi-Efficiency" SPEED UNIT



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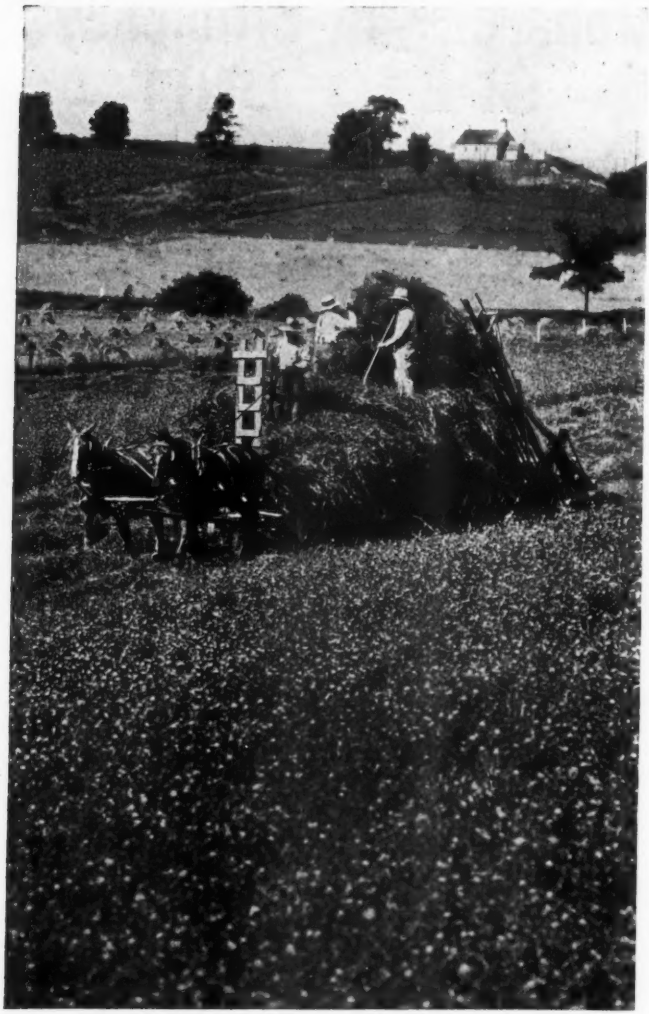


He that observeth the wind shall not sow; and he that regardeth the clouds shall not reap.—Ecclesiastes.

ELECTRICITY ON THE FARM

JULY, 1932

"Music's the cordial of a troubled breast,
The softest remedy that grief can find;
The gentle spell that charms our care to rest
And calms the ruffled passions of the mind."

—JOHN OLDHAM (1653-1683).

Today those living on the most remote of farms may learn of great world events as early as those residing in the largest cities; great operatic performances may be heard in the humblest of farm homes; the finest of entertainers now count among their regular listeners vast multitudes of those located far from the big centers of population. All this is the result of radio.

No longer need a farm family be isolated from the world, even in the severest of winter weather; no longer need the long winter evenings be tiresome, for programs to suit every taste will be found on the air.

For those interested in more serious subjects, there are plenty of educational features to be had at the turn of the dial.

Music, however, predominates; and well it should. It is a panacea for petty worries; it is uplifting; it provides true employment. The best the world has to offer is presented by capable artists to the listening public. To those who have not had opportunity for musical education, air courses in music appreciation are offered.

While we are recounting the many troubles of the present day, it would also be well to recount the many blessings which the modern farm home receives over those enjoyed even one generation back.

Truly, radio has brought happiness and contentment to farm homes from coast to coast.

EASY ENSILAGE CUTTING

By E. R. MEACHAM

Lining up, anchoring, and belt tightening do not bother Keystone Farms. They mount their motor right on the cutter.

EVERYBODY wants to know how to save money these days. The farmers that are mastering the problem of reducing expenses, producing efficiently and cutting their costs to meet the present markets are accomplishing miracles of good management.

Last week I visited a farm where this is being done. Along with the 112 acre farm that has been in his family for three generations, William Kuntz of Merton, Wisconsin, evidently inherited the good thrifty practice of "cutting his coat according to his cloth," for he has replanned his farm operations on a one man scale during these times of low prices so that he is practically free from any expense for hired labor.

Mr. Kuntz uses the barn that his grandfather built, but he has substituted electric power for human labor. In fact he has been so successful in putting motors to work that his neighbors call him "Push Button Bill."

Silo filling was the first job on which he decided to economize. He has a big silo,—the tallest in the township. It is solid concrete, roof, chute and all, poured in one continuous piece. Inside it is 14 feet in diameter and 55 feet deep, and it stands 45 feet above ground, a considrable lift for an ensilage cutter.

"When that silo was first built," Mr. Kuntz told me, "I used to hire a thesherman and his power outfit to put in my corn. I exchanged help with my neighbors in order to have a full crew of men and teams, so we could keep the machine going steadily for a ten hour day. In our part of the country it was customary for the farmer to furnish the coal or gasoline and board the crew and teams. The thresherman charged one dollar a foot for filling. It took 18-20 hours to fill

my silo and we had six or seven teams and about fourteen men on the job."

Then several of the men about the neighborhood began buying tractors of their own for field work, and they decided that as long as they had the tractors standing there in the sheds, they might just as well get a filler and put up their corn themselves.

This cut down the crews and the farmers that were left in the ring could not keep the big machine busy. Of course it took longer to fill the silos, and the threshermen were dissatisfied with slow filling because they were paid by the foot. It was hard to hire extra help, for those were the days when the near-by Milwaukee factories had swallowed up all the available labor. The threshermen met the situation by charging the farmers $2.00 an hour, plus the fuel and board as before.

Decides to Motorize

Even this was not satisfactory, Mr. Kuntz said, and other farmers turned to individual operation so the ring was broken up. Mr. Kuntz was not a tractor man, and after a careful study of the costs and labor involved in its operation, he decided to buy an electric motor and a roller bearing cutter for the job.

"They promised me that a small motor would do it," Mr. Kuntz said with a wicked twinkle in his eye. "I had every confidence in them,—those fellows couldn't afford to tell me anything but the truth if they'd wanted to; they've got to keep on dealing with me—but I wanted to be absolutely sure.

"When we got the wiring done, the motor set up, and the silo filler in place, I harvested my corn and called on those salesmen from the power company, and a man from the silo filler manufacturing company to come out and help me get started.

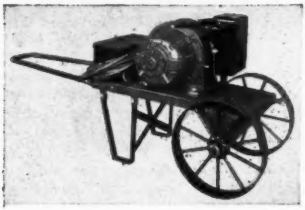
"They came and we got to work at once. I've always felt a little ashamed of the trap that I had set for them, even though they didn't get caught in it. I had brought up a couple of loads of the heaviest green corn in my fields, grown in a cup or hollow where the stalks were big, juicy, and tall, with large green ears. I had waited so that it was touched with frost and then cut it into bundles of medium size with the bands about one and one-half feet from the butts. The weather had favored me with a good soaking rain that drenched those bundles lying in that muddy hole. Never had I tugged and heaved on a more soggy mass of grief in my life. Two of us men loaded it the day before so that our strength would have returned over night, and we could both heave these tough bundles into the machine as fast as possible next morning."

Required Proof

Mr. Kuntz smiled reminiscently, as he shook his head over that corn.

"Remember that they had guaranteed that the motor would put the corn up into my silo," Mr. Kuntz went on. "Sure enough, the first bundle did go up all right. Then they gave us the signal to pitch in. We did, cross ways, length ways, two bundles at a time, two men pitching and one man feeding, or trying to when he got a chance. That corn went up into the silo in record time, and I knew that if that motor and cutter would

This is a one-man crew. The neighbors are watching the job.



A portable motor suitable for silo filling. The lever works an anchorage device that will either push or pull.

handle corn like that, it would take care of anything I'd ever throw on the cutter table."

The machine that passed this strenuous test is a cutter of the flywheel type, equipped with roller bearings and having a throat 13 inches wide. It is driven by a motor of only 7½ h.p. On the motor is mounted a magnetic switch with two push buttons so that the outfit can be started or stopped instantly at the touch of a finger. Within the same switch there is an overload device that protects the motor. It will allow the motor to carry big overloads for a few minutes at a time, but it shuts off the current before the motor can be injured. And it does not blow a fuse; after a moment's rest to cool off the motor can be started again.

Usefulness Increased

To increase the usefulness of this power plant by making it readily portable, Mr. Kuntz put it on wheels. He mounted it on a good hand power village fire cart with which volunteers used to run to fires. At the front of the truck there is a reel of rope that had been used for pulling it. This proves useful in anchoring the motor and tightening the belt. The rope is fastened to a stake or anything solid; then the slack is taken up by turning the reel which is held by a rachet. This outfit can work in various places about the barn and yard, for it gets its supply of electricity through a big heavy cable with an outer covering of thick rubber.

This equipment has been operating successfully for the past five years, Mr. Kuntz says, with no more expense than oil for the motor and roller bearings of the cutter, grease for the cutter boxes, and the cost of the current that runs the motor.

"I bought when things were high," he went on, "in fact, I paid $650 for my equipment, but I feel it was a very profitable investment.

"One of my neighbors got a motor and cutter when I did, and he has added a new feature of his own invention that makes his rig a strictly one-man outfit. He has the push button box on the end of a cable reaching from the magnetic switch to the top of a post set at the end of the feeding table and in such a position that a man driving up to the cutter with a load of corn could start the motor without getting down from his wagon. He has rigged up a lever, attached to the reverse bar of the cutter, so that at any time he could stop or start the apron of the feeding platform. It works slick as a whistle."

Reduced Milk Cost

Mr. Kuntz has achieved outstanding success in cutting down the cost of producing milk through the use of cheaper silage. But anyone who will follow his example and meet the same conditions can get similar results.

The selection of an ensilage cutter for small motor drive presents the first problem. Old style silo fillers depended on a blast of air from a fan running at 700 to 1000 r.p.m. to blow the corn into the silo. The blower pipe was as much as a foot in diameter; this required an enormous volume of air to provide enough blowing force. Turning a big fan or paddle wheel at high speed, even without cutting or elevating anything but air, takes a lot of power. So a filler of this description cannot be successfully operated with a 5 or 7½ h.p. motor.

But modern silo fillers are designed to throw rather than blow the cut fodder up the pipe. For

that reason the paddles must fit their housing very closely so that each can carry its little load of silage without losing it and hurl it neatly up the spout. To lessen the windage and make their machines run easier some manufacturers have reduced the size of their paddles by cutting down the blades toward the center of the wheel and leaving them the full width of the housing for only a few inches right at the tips.

To make this throwing action easier and more successful the discharge pipe on some modern fillers is set back about half its diameter so that the ends of the paddles as they come around are in line with the center of the pipe instead of its back edge. The idea is that when the paddle tips hurl the silage off at a tangent, it can fly right up through the open pipe better and easier than it can slide up along the side. It is a good idea for it really works that way.

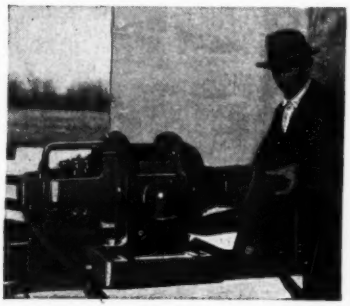
The same principle applies in setting up the discharge pipe. Unless it is perfectly straight and lines up both ways with the flywheel housing, it will be harder to throw the ensilage through it, and that will require more speed and more power. It is very easy to get good alignment by blocking up or letting down the wheel of the filler as required.

Choose Proper Size

The size of the cutter is another point to consider in selecting one for motor drive. There is nothing to be gained by getting one unduly large and the big ones cost more. But there is danger of selecting a machine too small because so many people still doubt the ability of a 5 or 7½ h.p. motor to handle this job in a practical manner. If the cutter is too small, it will require more care in feeding. This will slow up the operation and may even require an extra man at the feed table. A cutter classed as a 12-14 inch machine and having a throat opening of 75 square inches will be about right. For with such a cutter and reasonably good bundles one man can be the whole silo filling crew.

Having a simple, well designed, easy running cutter of proper size the whole secret of driving it with a small motor lies in keeping the knives sharp and set close up to the shear bar, and in running at very slow speed.

The great importance of low speed and the wastefulness of high speed was well illustrated by a test at one of the experiment stations. First they carefully measured the power needed to run a



Above: The little motor on the high cart fills the silo.

Right: Mr. Kuntz and his portable motor.

silo filler at a low speed, say 350 r.p.m. It was around 5 h.p. as I recall it. Then with the same filler and all other conditions the same, they doubled the speed. At 700 r.p.m. that same machine took some 35 h.p. To be sure when the feed table and the knives ran twice as fast, they were capable of handling twice as much corn, but it is very likely that in ordinary practice they would run empty a greater part of the time. Even if twice as much was cut and elevated, it cost about seven times as much for power or three and a half times as much per ton.

Fan Speeds

Mr. Kuntz is perfectly satisfied with a speed of not quite 450 r.p.m. using a 5½ inch pulley on the motor and a 22 inch pulley on the cutter. That never fails to throw his corn to the top of the 45 foot silo. If his cutter fan were smaller, it would have to turn more revolutions per minute to give the paddles the same actual speed and an equal throwing force. But if his silo were not so tall, he could run his machine even slower than he does. The proper speeds for fans of different sizes elevating into silos of various heights are shown in the table below prepared at the Wisconsin College of Agriculture.

Dull knives of course, waste power. In Kansas they found that for each succeeding load of corn the use of energy increased about 1%. Dull knives required 35 to 60% more power than sharp ones. When you have only 5 h.p. all told, you cannot afford to waste half of it on dull knives, so change them every half day of running.

Keep Shear Bar Sharp

And after all, the knife is only half of the cutting device, the ledger plate or shear bar is the other half, for together they cut like a pair of shears. It is important, therefore, that the shear bar be sharp too, and that the knives run as close to it as possible. Scissors that do not meet do a poor job of cutting.

When these simple conditions are met, what results can be expected?

Under favorable conditions even with a 5 h.p. motor, the outfit will handle corn as fast as one man will want to lay it on the feed table. Dozens of trials have shown a capacity of five to ten tons an hour all day long. That will usually keep about four teams busy hauling, depending somewhat on the distance to the field and how short the silage is being cut. To get quarter inch lengths, for example, the feed table travels forward only half as fast as for half inch cuts. The very fine silage is also a little harder to elevate.

Some farmers make the best possible use of their tractors as well as their teams at silo filling time by hitching the corn binder behind a tractor and even putting a bundle loader on it to avoid the hardest part of the job in the field. Then they can use all their teams on the fodder wagons.

However, a crew of five or six men is not at all necessary. It is just as practical and just as efficient for one man to handle the job all alone.

Fan Speeds for Filling Silos of Various Heights

Diameter of Cutter Fan in Inches	Height of silo in feet								
	25′	30′	35′	40′	45′	50′	55′	60′	75′
	Revolutions per minute of cutter fan								
30	500	530	575	610	650	690	720	750	835
32	465	495	540	575	610	645	675	705	780
34	440	465	510	540	570	610	635	660	735
36	415	440	480	510	540	575	600	625	695
38	390	415	450	480	510	545	570	595	660
40	370	395	430	460	485	515	540	565	625
42	355	380	410	435	465	490	515	535	595
44	340	360	390	415	440	470	490	510	570
46	325	345	375	400	425	450	470	490	545
48	310	330	360	380	405	430	450	470	520

He can fill his silo when he is ready and the corn is just right, not too early so that he can help his neighbors fill their silos, not too late after theirs are all done. If his corn matures unevenly, he can begin on the ripest and harvest it as it comes on.

For the one man crew, stormy weather or any delay means less lost time; he can immediately turn to other work.

Though it will take longer to fill his own silo, his silo filling season will be shorter than when he is a member of a ring. He spends less time on the road and is able to take better care of his own chores.

Reduces Expenses

He avoids the expense of boarding men and teams and saves his women folk a lot of hard work.

Then, of course, because he fills slowly he will get more corn into his silo; he will not have to get the crew back for refilling and because he can fill as he cuts and never have a lot cut ahead and lying on the ground; he can provide for his stock silage of quality.

The total cost of silo filling varies too widely and depends on too many conditions for any general discussion. The cost for electric power will depend upon the local rate, but the amount of electricity needed has been pretty carefully studied. Mr. Kuntz got it down to only a little over ½ kw. hr. per ton, but it usually takes 2/3 to ¾ of a kilowatt hour to cut a ton of ensilage and put it in the average silo.

FAR AWAY there in the sunshine are my highest aspirations. I may not reach them, but I can look up and see their beauty, believe in them, and try to follow them where they lead.

—L. M. Alcott.

The electric motor is always ready for any task within its power capacity, and grain elevating is no exception. It is the farmer's right hand man.

BETTER CROPS AND

This article does not apply to the irrigated districts, but rather to places where it is generally supposed the natural precipitation is sufficient to produce crops.

By J. C. SCOTT
Agricultural Engineer

AN average annual precipitation of 33.43 inches, as we have here in Western Washton, would seem to indicate that supplementary irrigation is entirely unnecessary and out of place in this locality. But from our experience of the last few years, irrigation, made practical on most farms by electric pumping outfits, pays well for the necessary investment.

Irrigated sugar beets yielded approximately 15 tons per acre more than those not irrigated, in the same plot, according to Mr. J. W. Timpson, Manager of the Beet Sugar factory at Bellingham, Washington.

The above figures were obtained by Mr. Timpson's company on a plot of sugar beets on the factory site at Bellingham. The plot was planted last year and two-thirds of it given a thorough watering twice during the dry part of the growing season; the other one-third was left without water. At harvest time there was a difference of 15 tons to the acre, as stated above.

"In past years," reports Mr. Timpson, "we know of cases where additional returns of from 8 to 10 tons of sugar beets per acre have been obtained through irrigation. Two additional tons of sugar beets per acre at $7 per ton should more than pay for most any kind of practical irrigation.

"In my opinion there is no reason in the world why the pastures which are so valuable in this dairy country should be permitted to dry up in midsummer and why our crops of berries, vegetables, potatoes and sugar beets should be permitted to yield average or less than average returns when tremendously profitable crops could be harvested through irrigation at the right time."

Mr. S. L. Harper, living near Puyallup, Washington, who produces some very fine gladioli, says, "Irrigation is absolutely necessary to produce these gladioli on sandy soil."

Mr. Harper's irrigation system consists of a 2 H.P. electric motor and 2-inch centrifugal pump, which pumps the water from a small creek running through his place.

The water is conveyed from the pump to flumes by an old fire hose. Wooden flumes conduct the water to the high points of his field.

After irrigating strawberries for the past eight years, near Edmonds, sixteen miles north of Seattle, Mr. O. T. Kline states, "My records show that I have produced and sold 700 crates of Marshall strawberries per acre in one year where 200 crates is about all than can be produced without irrigation."

"Irrigation makes it possible for me to get two crops from some of my land in one season," says Mrs. Jennie Ferguson, pioneer in irrigating commercial garden and ber-

ND MORE MONEY

through irrigation

ries in the Puyallup Valley. "After harvesting a crop of lettuce, I plant and harvest tomatoes, mangels, carrots, beets and cabbage on the same land.

"It not only increases the yield of my raspberries, blackberries and loganberries, but makes a far better cane development for next year than where no irrigation is applied.

"I never worry about the effect of dry years upon my berry crop. Even if I should not use my electric irrigation system some years, it is worth more than it costs as insurance against crop failure or small crops on account of drouth."

Oats have been produced at the rate of 110 bushels per acre on the irrigated part of a Western Washington field, and 60 bushels per acre on the part not irrigated, in the same year.

A group of 17 farmers north of Everett, Washington, with tracts of 1 to 9 acres, which they wished to irrigate, formed the Densmore Community Irrigation Project in the fall of 1928, with 60 acres to be watered.

Twenty-five acres of the land in this project were irrigated during the past season.

Water is pumped out of a creek by a 2½ inch centrifugal pump, delivering 200 gallons per minute, driven by a 5 H.P. electric motor. The water is pumped up 45 feet through an iron pipe and empties into a 10" x 10" cedar flume. The flume carries the water to each tract where it is then delivered

Irrigating strawberries in western Washington.

Upper: Non-irrigated kale. Lower: Irrigated kale. Both pictures taken same day in Puyallup Valley, Washington.

on the tracts by smaller flumes.

Under this method all the farmers may not get water every day. A rotation system can be practiced which gives larger amounts of water to one farmer at a time and relieves him of looking after his irrigation duties at other times.

On many farms in Western Washington where water from streams or lakes is not available, wells are sunk to a depth sufficient to deliver from 75 to 200 gallons per minute.

The electric motor affords the most economical and practical power for driving irrigation pumps. The motor, besides being economical to run, is always perfectly simple to start and requires practically no attention at all during operation.

Precaution should always be exercised in the installation of centrifugal pumps to see that the pump fits the job. Different sizes

Electric pumping outfit used for irrigation in central and western Washington.

in centrifugal pumps mean little. If 150 gallons per minute are to be pumped against a total head of 45 feet, a certain impeller is required; if the same amount of water is to be pumped 75 feet, another impeller is required. If 200 gallons per minute instead of 150 gallons per minute are to be delivered at either head, still different impellers to get best efficiencies are necessary.

Pump house and intake bulkhead on Allen Creek, where the Densmore Community get water for irrigation.

All of which simply means that a good pump engineer should look over the job and see that the pump and motor are installed that fit the job.

Regarding Pipe Sizes

Where water is delivered to different parts of the farm through a pipe instead of a flume or ditch, see that the pipe is large enough. Where it is just a little too small, the power requirement increases tremendously, which in turn increases the cost of operation.

As a guide for the right size of pipe to use in piping water on the farm for irrigation, the following table is suggested. If smaller pipe is used the amount of water delivered will naturally decrease and the current consumption will increase.

Table of Pipe Sizes

		2	gals. per minute	—	¾	in. pipe
		3	" " "	—	1	" "
		4	" " "	—	1¼	" "
		5	" " "	—	1¼	" "
		7	" " "	—	1½	" "
10	to	15	" " "	—	2	" "
20	"	30	" " "	—	2½	" "
35	"	50	" " "	—	3	" "
60	"	90	" " "	—	4	" "
100	"	160	" " "	—	5	" "
175	"	275	" " "	—	6	" "

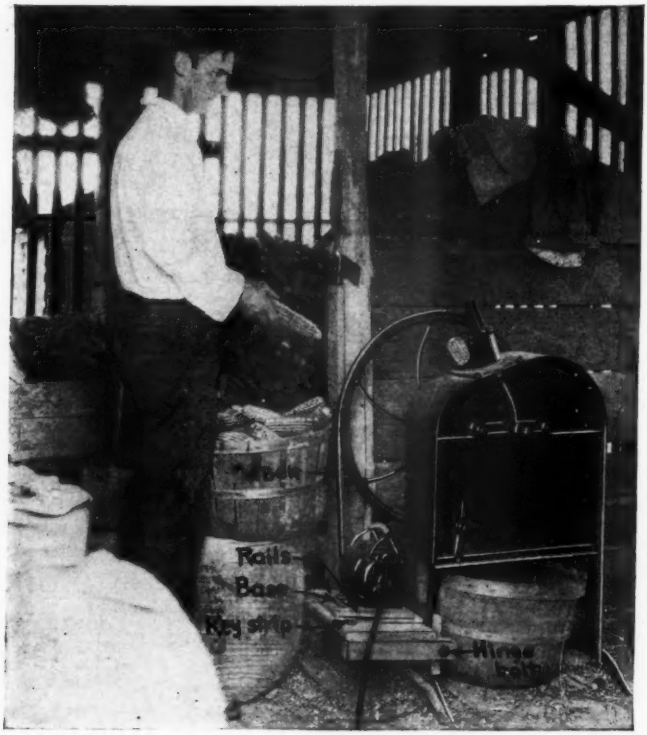
SHELLING CORN

with your 1/4 H. P. motor

By GEO. W. KABLE

MR. LEITER AITCHESON, one of cooperating farmers, on the National Rural Electric Project near Washington, D. C., saves labor by using a ¼ horsepower electric motor to shell corn for his flock of hens. A motor of this size is large enough for any sheller that can be operated by hand, the only problem being to attach the motor to the sheller.

The difficulty with the sheller as with most farm machines is to operate it at correct speeds with a



Leiter Aitcheson shelling corn with ¼ H.P. motor, showing convenient attachment of motor.

standard motor turning at 1800 revolutions per minute or thereabouts. It was accomplished in this case by having a groove machined in the fly wheel of the sheller and using a one piece V belt similar to an automobile fan belt. These belts are made in a great variety of sizes by a number of manufacturers and have a long life and high efficiency of transmission.

The motor is permanently attached to a small wooden base which is made to slide under wooden guide rails which are attached to the various machines to be driven. A handle is provided on the motor for ease in carrying from place to place. When the job of corn shelling is completed for the day, the key strip holding the motor in place is removed and the motor slid out and carried to the next job.

The wooden sub-base, to which the rails are attached, is in this case attached to the corn shellers by means of one bolt which passes through the angle iron legs of the sheller and acts as a hinge for the motor base. In using, the weight of the motor serves to keep the belt tight and there is no trouble from slippage or the belt running off the pulleys.

Flat belts may be used for driving shellers and other equipment, but they are not satisfactory because pulleys are not usually smooth enough, or shaped so as to keep the belt from running off. The National Rural Electric Project is recommending to manufacturers of small farm machines that grooves be cast in the pulleys to permit the use of round or V belts. This could be done in the process of manufacture at very little if any increased cost.

HAY HOISTING

Requires Little Power

By A. E. SMITH

RECENTLY, a series of very successful hay hoisting demonstrations using a portable 5 H.P. farm chute motor with a double drum hoist, were held on Maine farms.

The farms selected were of average type, run by a good representative farmer in his particular community. The motor used was the 5 H.P. rather than the 3 H.P., for it was desired to introduce an

Fig. 1. Five H.P. motor belted to a double drum hoist. The heavy hoisting rope can be seen in the background running to the smaller return drum.

all-purpose motor which could be used for silo filling, wood sawing, feed grinding, and other farm operations.

The illustrations show a typical set-up taken on the farm of F. R. Bailey of Woolrich. Fig. 1 shows the 5 H.P. motor belted to the double drum hoist. The heavy hoisting rope can be seen in the background running to the smaller return drum. The clutch levers are pulled toward the hoist pulley to operate the drums. The large drum of the hoist is equipped with a brake that sets itself when the clutch lever is released. This is very handy in holding a fork full of hay when the rope twists before locking in the carriage on the track, and in holding the fork in place when dumping in the loft.

The man on the load, running the fork full of hay back into the loft, is shown in Fig. 2.

All of the current used in running the electric hoist was metered. The average consumption was 1 Kwh. for every three loads hoisted.

Fig. 2. Fork full of hay being drawn back into loft.

INVESTIGATE!

When considering the purchase of new equipment, make use of the advertising pages of ELECTRICITY ON THE FARM.

You can be sure that our advertisers will give you quality and full value. Their products have proved their worth for farm use and have the endorsement of your Power Company.

Electric Ranges See pages 2 and 5

Refrigerators See pages 3 and 23

Water Systems See pages 29 and 31

Hot Water Heaters See pages 2, 5 and 25

Milk Cooling Equipment See pages 3, 23 and 25

Chore Motors See page 27

Electric Cookers See page 31

ELECTRICAL HOUSEKEEPING

Conducted by
GAIL MEREDITH

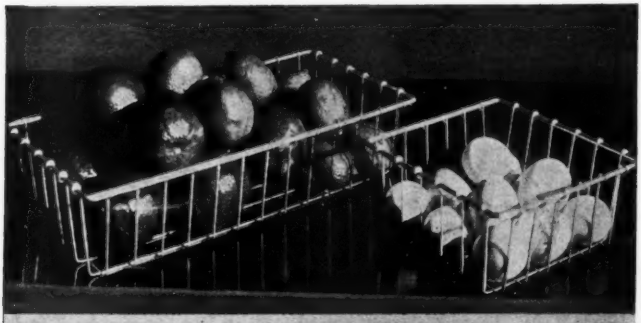
Refrigerator Dishes

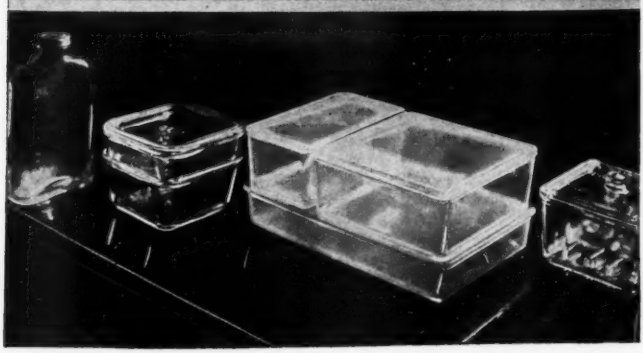
WHEN I was a small girl, we used to have a set of peculiar dome shaped wire mesh covers that fitted over the food we carried down to put on the packed dirt of the cellar floor. The wires, I believe, were to keep off forays of marauding mice. They came in varying sizes, the covers, I mean, not the mice,—and spread out like little beehives when the food was put away. Of course space was no object on the cellar floor.

It is in the new refrigerators, though. The need for conserving that space has given rise to countless new designs for dishes that will snugly and properly store our food. I say properly because some of it must be covered and some left open to keep it best.

Many of these dishes come in sets. They nest one on top of the other, or two small ones on top of a third. They are made of glass, or metal, or crockery. Many of them can be used both in the refrigerator and the oven, saving an extra dish.

Glass dishes specially made for butter and cheese are not really new, but quite important for tak-





ing care of these things in the refrigerator. The cheese dish in case you haven't seen it, has lugs in the bottom that hold the cheese up out of a mixture of vinegar and salt that will keep it moist and fresh for weeks. Theses dishes come in different sizes and in different shapes, round or square.

The vegetable crisper is definitely a product of mechanical refrigeration designed by some alert manufacturer who saw that no one could find just the right thing to store head lettuce or celery. It is made of enamel and fitted with a tight cover. The first one came out as a new feature of one refrigerator and was actually clamped to one of its shelves, sliding in and out. Now many firms make them in several different sizes, and they sit on a shelf like any other dish. They are an important contribution to food care, for they do keep vegetables appetizingly fresh and crisp.

For Chilling Drinks

A good many people like to keep fruit drinks and water in their refrigerators. There are several attractive water bottles made to store them. There is even a special refrigerator pitcher with its handle sunk in the side, and a lid on top, so it can be used to keep water cold, and to serve it as well. There are enamel water coolers with faucets attached that stand permanently on one of the shelves near the chilling unit, and provide a constant supply of cold drinks—if you don't forget to fill them up.

Oranges and eggs do not have to be covered, so for them there are long wire baskets, and square wire baskets that keep these things compact and tidy in the least possible space.

Every season sees some variation in special ice cube trays that you can use in your old refrigerator. The rubber trays shoot the cubes out easily. A new tray with triangular sections freezes prisms of ice, that come popping out, they tell me, if you give the tray a little twist.

For special days there are dozens of fascinating little molds and big molds for frozen or chilled desserts and jellied salads There are even fancy tubes to mold the dough for ice box cookies in unusual shapes.

Keeping things tidy inside the refrigerator is an easy matter, once you get the hang of it, and fit your shelves with the proper dishes.

• • •

A New Slant on Old Desserts

IT is the first thing we hear in the morning, and the first thing we hear when they come into the house at night.

"When do we eat?"

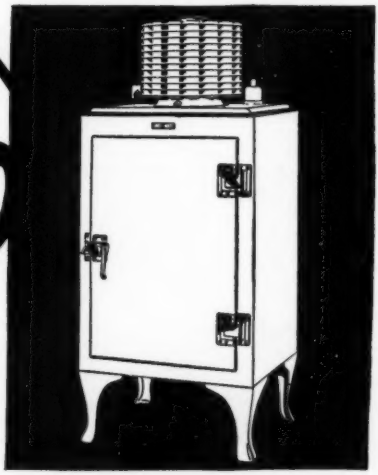
It is not the *when* but the *what* that bothers us folks who get the meals. Only recently I have learned that our government actually takes a maternal interest in that question for us. There is a considerable force of people who study the value of foods; and work out combinations for us that we may make in our own kitchens and serve on our own tables. This month it is desserts, and desserts that come right out of our own gardens, if we are thrifty gardeners.

The first is a short cake.

Now I know as well as any one

LOW COST REFRIGERATION

depends on the Mechanism NOT *on a* "BARGAIN" *price tag!*



THE MECHANISM of any modern refrigerator creates cold, freezes ice and makes possible every convenience and economy of modern refrigeration. If the mechanism fails to operate, you are without refrigeration. If you live on a farm, you are likely to go without refrigeration for days. Service and repair charges begin. • The Monitor Top mechanism of the General Electric Refrigerator is the most reliable, efficient and the cleanest refrigerating unit ever built! It requires no attention, not even oiling! • In more than 1,250,000 homes, the General Electric has established an unparalleled record for unfailing, trouble-free operation . . . for lowest cost refrigeration service! • General Electric Company, Electric Refrigeration Department, Section CZ 7, Cleveland, O.

that there are two sides to this short cake question and that any one who takes sides at all is violently for or against.

I, myself, am a biscuit short caker. I look upon biscuits, rich and flaky with a little extra fat, and, if you insist a table spoon of sugar stirred in with the milk, as the only proper vehicle for a short cake. Sometimes I make it all in one and split it lengthwise to butter it and tuck in the berries. Or if there is company for tea, I cut it out into rounds with my biggest cookie cutter and lay one round on top of the other to bake, so they will come apart neatly for buttering and a layer of strawberries.

But no one can be blind to the other side of the question. And to folks who like their short cakes sweet, I recommend a new sponge cake that the Bureau of Home Economics has recently sent out.

Sponge Cake

4 eggs
1 cup sugar
3 tablespoons cold water
1 cup sifted soft wheat flour
1 teaspoon baking powder
¼ teaspoon salt
½ teaspoon vanilla
½ teaspoon lemon juice

Separate the egg yolks from the whites, and beat the yolks well. Gradually beat in the sugar, add the water, and continue the beating until the mixture is very thick and light. Sift the dry ingredients together, and fold them into the egg and sugar mixture. Then fold in the stiffly beaten whites of the eggs, add the flavoring, and bake in two layer cake pans in a 325° F. oven for twenty to twenty-five minutes, or until the cake is a delicate brown.

Even in the serving, we makers of short cakes are divided into two camps. Some of us eat them with whipped cream, and some of us want cream we pour from a pitcher. I like the last, myself, so we can pass the pitcher around again if the short cake outlives the cream.

The other dessert whose makings we raise in our garden is baked rhubarb.

"It is best when cooked in a glass or earthenware baking dish," says the writer from the Bureau of Home Economics, "and as it can be sent to the table in the same dish it makes an easy dessert.

"Cut the rhubarb in pieces about an inch long, but do not peel it. The attractive red color is in the skin, which is edible, and which gives more body to the fruit when it is not removed. Sprinkle the rhubarb with sugar as you put it into the baking dish, dot the top with bits of butter, cover and bake for about twenty minutes. When

the rhubarb has steamed tender, remove the cover and let the top brown slightly."

There are lots of things to do with rhubarb. You can make it a "Betty" by alternating layers of rhubarb with layers of buttered bread crumbs. You can make it a deep dish pie by lining a baking dish with biscuit or pastry dough. You can make it a short cake by splitting the biscuit and piling it with the baked fruit. And it turns up as a cobbler if you cover the baking dish with a thick biscuit dough.

• • •

Care of Meat

HOUSEKEEPING is rapidly becoming one of the skilled professions. Only it is one most of us learn by practicing rather than by careful years of academic preparation. Happily for us somebody else is giving it the professional study we have no time for, and teaching us as we go, the new discoveries that science makes on our behalf.

We would never have found out very much about refrigeration for ourselves, I am afraid. But the Bureau of Home Economics at work in those research laboratories of ours in Washington has found out a good deal about it. The effect of temperature on milk and meat, two of our most susceptible perishables, has been studied in detail.

We are fairly familiar with the care of milk. We know that it must be kept cold to keep it sweet and wholesome, and we put it in the coldest part of our refrigerators. The work the Bureau did with meat is not so widely known, but it, too, resulted in very definite, complete recommendations for the care of meat after it comes into the house.

The bacteria that spoil the meat work and grow most rapidly and effectively before it is cooked, but they, like the bacteria in milk, are

(*Continued on page* 34)

"Never a moment's trouble in more than 5 years with my ESCO Milk Cooler"

. . . says E. L. LAWN of Pennsylvania

Using his ESCO Milk Cooler continuously for over half a decade, Mr. Lawn is naturally an enthusiastic booster for ESCO.

The cooling of milk long ago ceased to be a problem with those dairymen who have installed ESCO Milk Coolers. They merely plunge their cans of milk in the ESCO and *forget them.* Automatically, the milk is quickly cooled to below 50 degrees and kept cold until shipped.

At the new low prices, established at the beginning of the warm season, ESCO offers *you* a definite way to increase *your* profits and insure your market.

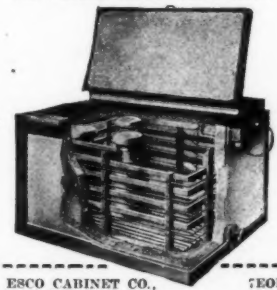
Quick, sure cooling and efficient, economical operation are ESCO features that have made thousands of dairymen enthusiastic ESCO users. You'll want these advantages. Why not get complete information now? Ask also about ESCO Dairy Water Heaters and ESCO Electric Dairy Utensil Sterilizers.

Use convenient coupon

ESCO CABINET COMPANY
Manufacturers
WEST CHESTER, PENNA.

ESCO

The Patented Electric Milk Cooler



ESCO CABINET CO., 7EOF32
West Chester, Pa.

I make ..... cans of milk daily.
Please send full particulars on:

( ) ESCO Milk Coolers
( ) ESCO Water Heaters
( ) ESCO Dairy Utensil Sterilizers

Name .....

Address .....

P. O. ..... State .....

ON THE AIR

Conducted by
JEROME J. HENRY

Insist They Are Not Hillbillies

SONGS of the South and of the soil are their specialty, but the McCravy Brothers of Laurens, South Carolina, insist they are not hillbillies.

Frank and James never did much radio work before they came to the network studios in New York for an audition. They have been broadcasting on local stations in different parts of the country at various times, but for the most part have been kept busy making phonograph recordings.

One of the boys' proudest recollections is of the time they were chosen as native sons to appear with the governor and the chief justice of the state supreme court on a radio program in honor of South Carolina.

Although their radio programs consist mostly of unique songs, duets, and occasional solos, they entertain their friends off the air in other ways. Frank is an accomplished amateur musician and likes to tell Negro dialect stories, while Jim plays the violin and the guitar.

• • •

No Snap for Marine Band Musicians

LIFE isn't a picnic for the members of the United States Marine Band. That's what a visitor would say after watching them at

Joe Palooka is a seafaring man. He had his picture taken to prove it. He's on the air, as played by Ted Bergman, each Tuesday and Thursday night over a CBS network at 7:45 p.m. Eastern time.

work at the Marine barracks at Washington, D. C., where the band rehearses for numerous broadcasts over both CBS and NBC networks and for appearances at numerous affairs at the nation's capitol.

Rehearsals are serious occasions when every man is tuned up to concert pitch, for every member of the band understands the high expectations of the American public when the Marine Band is going to play.

Captain Taylor Branson, distinguished leader of the organization, wields the baton, and his able direction and intimate understanding of arrangements play a big part in splendid performances.

Besides the vigorous rehearsals there are dozens of engagements to be filled by the Marine Band which is in constant demand for diplomatic functions, civic and patriotic parades, White House concerts and various social affairs that play a part in life at Washington.

• • •

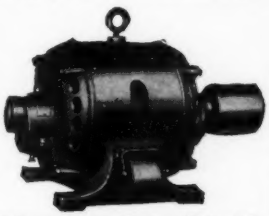
"Wake Up Network" Each Morn

A WEIRD ritual called "waking up the network" is chanted in the NBC studios early every morning before the first dial twisters tumble out of bed.

The studio vanguard of two engineers regularly calls the roll of stations, checking the facilities that link stations into a broadcasting system. At 6:30 in the morning they throw a switch and begin shouting into a microphone. The strange roll call goes on until all the stations scheduled for the first program are lined up and checked to the satisfaction of the engineers.

"Woof" is a meaningless word adopted by engineers as a standard call to test equipment. They talk into a microphone and their voices are relayed over the regular telephone lines that connect the stations. The only difference is that that the transmitters are not on the air and so radio listeners are

"They Keep a-Running"



5 Horse Power Century Type SC Squirrel Cage Motor

STEADY SERVICE

For steady, continuous service in the operation of pumps, refrigerators, feed grinders and other farm equipment, rely on Century motors . . . They are rigidly built . . . they "Keep a-Running" even when subjected to hard usage . . . even under the effects of dampness and moisture.

For more than 28 years, Century motors have proved to be a reliable source of power supply on the farm, particularly in operating automatically controlled pumps.

Built in standard horse power ratings from 1/4 to 250.

CENTURY ELECTRIC CO.
1806 Pine St. St. Louis, Mo.

Century MOTORS

E. A. O'Neal, president of the American Farm Bureau Federation, is a firm believer in country home modernization and electrification. His inspirational talks are often heard in Farm Bureau programs during the broadcasts on the second Saturday of each month over NBC stations.

deprived of the novelty of listening to the strange "waking up" ceremony. Sometimes, however, member stations are doing local testing at the same time and one unavoidably switches on a transmitter. Then the queer calls may go hurtling into space and be reproduced in the homes of early risers.

• • •

Artists Portray "Down East" Characters

HOUSEHOLD routines are often adjusted so many families may follow the simple adventures of Esley Stebbins and John Stebbins. John and Esley are the proprietors of a general merchandise store in Bucksport Point, Maine.

They're bachelors. Neither has ever roamed far from the little Maine village, but the third brother, Captain Bill, is on the other side of the world as skipper of an old four masted schooner.

The two men quarrel almost continuously,—about their store, local politics or love affairs of Virginia Pennypacker who tried vainly to marry each of the boys. For fourteen years John and Esley did not speak to each other, but finally, after many attempts to reconcile them, brother Bill tricked them into a free-for-all battle in which they joined forces against him. In the heat of combat they forgot their long standing differences and became friends again. Then Bill sailed away on his vessel.

The role of Esley is played by Arthur Allen, veteran character actor of the stage and radio. Allen won his reputation as radio's most successful interpreter of "Down East" characters. His partner of the air is Parker Fennelly who plays John Stebbins and is truly a "Down Easter." He was born on Mount Desert Island just off the coast of Maine. He grew up there, seeing little of the outside world until he moved to Boston to attend a dramatic school.

The Stebbins boys are heard over NBC stations every evening except Saturday and Sunday at 7:30 o'clock, Eastern Standard Time.

Ann Seymour, musical comedienne, and guest artist on Columbia Broadcast System programs.

WLS Boys Move Their "Hay Loft"

SATURDAY night barn dances broadcast every week by station WLS on the 870 kilocycle wave length have been attracting so many visitors that it was recently necessary to move the performance into a large theatre.

This popular feature has long been a favorite among country folk who love the old songs and numbers presented by the extremely versatile staff of WLS artists. Many visitors to Chicago include a visit to the barn dance broadcast in their schedule.

But the old "hay loft" as it is termed by the familiar announcer was out-grown by the crowd.

• • •

McNamee Doesn't Know What Made His Fame

REGARDLESS of what the neighbors thought when, at the age of six he laboriously practiced his piano lessons, Graham McNamee today is conceded one of America's best known announcers and the dean of his profession.

If you ask McNamee what it takes to become popular before the "mike," he will shake his head in despair. The agile adjective acrobat can't say. He went into radio as a temporary occupation until he could obtain sufficient bookings as a concert artist to keep the wolf from the door.

He has remained in radio because in ten years he has never had

(*Continued on page* 31)

Will Rogers: Tune him in, and you'll love him. Diplomat, movie star, stage performer, humorist, writer, polo player, and a real American favorite. Will's radio appearances are also one of the bright spots on the dial.

NEW LOW PRICES!
Ask your dealer to show you how much you save through buying now
No cheapening of design, no lowering of quality! The same reliable MYERS Pumps and Water Systems you have always known — now offered at economy prices never before possible for products of such high quality.
MYERS
Self-Oiling
Water Systems
For deep or shallow wells; for operation by hand, pump jack, engine or motor. The most complete line in the world. Capacities from 250 to 10,000 gallons per hour. Latest improved models from $65.00 up. Write for booklet and dealer's name.
THE F. E. MYERS & BRO. COMPANY
367 Orange Street
Ashland, Ohio
Take Off Your Hat to MYERS

Questions and Answers

Conducted by H. J. GALLAGHER
Agricultural Engineering Dept.
Michigan State College

Question: *Is it possible to charge automobile batteries with current served us by the power company? I understand, of course, that it would be necessary to use a transformer to step down the voltage to a point slightly above the voltage of the battery.—W. A. C.*

Answer: No, automobile batteries cannot be charged directly with current served you by the power company, for this current is alternating current. Only direct current may be used for charging storage batteries. It will be necessary for you to employ a motor generator set or a rectifier, by either of which the alternating current would be changed to direct current.

* * *

Question: *I have a table showing the sizes of wires required by the Underwriters for different loads. But the contractor who recently wired our place tells me that it is frequently necessary to use larger sizes of wires than those specified in the table in order to prevent heavy voltage drops. Is this correct? If so, why do the Underwriters publish such figures?*

Answer: The figures which you refer to are probably those incorporated in the National Electric Code, published by the National Board of Fire Underwriters. These figures give the sizes of wire necessary to carry the specified load without dangerous overheating of the conductors. The Underwriters are chiefly interested in fire safety, and the figures they set forth are not necessarily applicable to all installations, where excessive drops in voltage are to be avoided.

For example, a circuit leading from the transformer to a group of farm buildings may be of considerable length and the size of wire specified by the National Electric Code for the load to be carried may result in too great a drop in voltage along the line, with the result that lights would not give their full brilliancy, and electric motors would not operate with highest efficiency. In such a case it would be necessary to use a larger size wire than specified for that particular load by the Code. Incidentally, that is one reason why capable contractors should be employed for installing electrical wiring. Their experience will avoid inefficient installations, and result in greater satisfaction.

* * *

Question: *I have a drop light in my horse stable, and several times I have received a shock when I turned the light off. The socket is brass and is covered with enamel shade.*

What causes this condition, and how may it be corrected?

Answer: It is apparent that there is a "ground" within the socket; in other words, the live side of the circuit must come in contact with the socket, due to a bare conductor within. Thus when the light is turned on, the brass socket is "alive" and when you touch it, the current passes from the socket through your body into the ground. It is also likely that

the floor of the horse stable is moist to enable the current to flow readily into the ground.

To remove the "ground" from the socket, it is necessary to take it apart and make sure that all bare wires, where they might come in contact with the socket, are properly insulated. This may be accomplished by cutting off the ends of the wire so that the rubber insulation will come up close to the binding post when the screws holding the bare wires are driven home. In some cases the fibre insulation between the interior mechanism and shell of the socket is incomplete, or defective. In this case it will be necessary to replace the fibre insulation.

But better than repairing the old socket would be to put in a porcelain one. As a matter of fact, porcelain sockets are far safer to use where there is a chance of the user receiving a shock, such as in places where the operator must stand on moist ground, or moist concrete. Porcelain sockets should be used for all such installations.

On the Air

(*Continued from page 29*)

time to get out of it. It has been his lot to convey the thrills of many world's baseball series to radio audiences. He has reported the leading fights of the last decade, has travelled across the continent to spend two hours describing a football game, and once came near exhaustion keeping radio listeners informed as to the doings of their delegates at the drawn out Democratic national convention of 1924. He described Lindbergh's return from Paris, and Byrd's return from the Antarctic and has described the running of the Kentucky derby a number of times.

• • •

Special Farm Programs Set for Summer

JOURNEYING to the scene of activity of many important agricultural events, the National Farm and Home Hour will, during the coming summer and fall months, bring to radio listeners many nationally significant agricultural expositions and meetings.

Among the programs will be a broadcast from the National Swine show at Springfield, Illinois, August 24; National Corn-husking

(*Continued on page 34*)

$75

Gives You Water for a Lifetime!

PAUL WATER SYSTEM

A dependable, economical pressure system. Write—

FORT WAYNE ENGINEERING & MFG. CO.

FORT WAYNE, IND.

Brand New! *Excel* FRYNROAST Makes Cooking *EASIER!!*

Connects to any convenient outlet. Has two speeds - 660 Watts HIGH heat for fast cooking - 45 Watts LOW heat keeps food hot for hours. Has plenty of speed for frying chops, steaks, chicken, potatoes, etc. - will fry eggs in 5 min. from time HIGH Heat is turned on. Cooks a 4 lb. roast and 6 potatoes as Fast as any stove and without water. Pays for itself through no shrinkage in foods and saving in fuel. Cleaner - cooler. Goodbye Hot Kitchen -- go to church, or wherever you will - come home to a delicious HOT dinner.

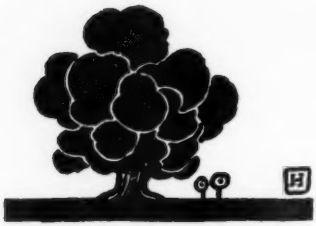
5 DAY MONEY BACK GUARANTEE

The regular price of the FRYNROAST is $7.50. On this Special Introductory Offer you may buy it for $4.95, postpaid Guaranteed 1 yr. Order the FRYNROAST - try it out in your own way and under your own conditions for 5 days. Then, if you are not satisfied for any reason you may return it and your money will be refunded. If your dealer can't supply you, mail coupon below.

The Excel Elec. Co., Muncie, Ind.
Send me a FRYNROAST, postpaid, on your 5 Day Trial Offer. Enclosed fin. my check for $4.95 ( ). Please send C. O. D. ( ).

Name_____

Address_____



Under The CHESTNUT TREE

The Novice

"How much do you get out of your new car?"

"Oh, about 50 miles to a fender."

Boy Wanted

Employer (to new office boy): "Has the cashier told you what you have to do in the afternoon?"

New Boy: "Yes, sir; I was to wake him up when I saw you coming."

Service

Hotel Garage Man (to fusser about midget car)—All right, sir, all right! I'll see it's refilled and washed and polished, and if you like I'll have it left outside your bedroom door with your boots in the morning.—Boston Transcript.

About Right

Professor: "What is an island?"

Student: "A place where the bottom of the sea sticks up through the water."

A Self-Stopper

"You cant stop there," yelled the Woodsville traffic cop at Cecil whose car stalled at the street crossing.

"You dont know this car," replied Cecil with a sad smile.—**The Lubricator,**

Strong Stuff

"Had a lot of fun last week with that cousin o' mine from the Tennessee mountains," said Yancy.

"As how?" asked Smythe.

"Found out he'd been drinking white corn likker for forty years, and just for fun I gave him a drink of pure muriatic acid."

"Killed him, I reckon?"

"Kill nothing! Why, he didn't know he'd taken anything stronger'n usual till he went to blow his nose and burnt a hole plumb through his handkerchief."

The Little Tyrant

Auntie: "Won't it be nice when baby brother talks?"

Joyce (rather jealous): "What does he want to talk for? He gets everything he wants by just yelling."

Boggs was proudly showing his new sedan to Joggs.

"But I thought your other car was less than a year old," said Joggs. "You only drove it about 8,000 miles, didn't you?"

"Oh, yes, it was still as good as new," replied Boggs, "but of course it was hopelessly out of date as soon as this new and improved model came out."

"Just how is the new model different?"

"Well, you can see at a glance. The automatic cigar lighter is an inch nearer the steering wheel this year."

The Curfew Hour

I had a girl named Nina,
Her father's name was Klok.
So everytime I had a date,
It was for Nina Klok.
—Minn. Ski-U-Mah.

Some Difference

The old gentleman did not try to help his wife into their new car as he used to in the horse and buggy days.

"You're not so gallant as when I was a gal," she told him.

"No," he replied, "and you are not so buoyant as when I was a boy."

The little grocer's shop had been in the Smith family for untold years. One day a notice was displayed on the window. It read: "Under New Management." The villagers were at once curious to find out who the new proprietor was.

Some time passed and Smith was still behind the counter, and the notice was still in the window. Eventually one of the bolder villagers decided to ask Smith the reason for the notice.

"When are the new people coming?" she asked the shopkeeper.

"New people?" echoed Smith. "What new people?"

"Why, you've got a notice saying, 'Under New Management,'" said the villager.

"Oh, that!" exclaimed Smith. "Why, didn't you know? I've been married."

When Ordering New Equipment

PATRONIZE THE MANUFACTURERS LISTED BELOW

THEY are leaders in their respective lines and are in position to take the best possible care of your requirements.

The fact that they are advertising in* ELECTRICITY ON THE FARM *indicates they want your inquiries and will be glad to submit specifications and prices.

Their advertising is helping us to make this a better magazine. You can help them and help us and help yourself by giving them your business. Let's all pull together!

	See Page
Electric Ranges	
Edison G-E Appliance Co.	2
Malleable Iron Range Co.	5
Refrigerators	
General Electric Company	23
Frigidaire Corporation	3
Milk Cooling Equipment	
Esco Cabinet Company	25
General Electric Company	23
Frigidaire Corporation	3
Chore Motors	
Century Electric Company	27
Stationary Spray Pumps	
Myers & Bro. Co., F. E.	29
Electric Incubators & Brooders	
Oakes Manufacturing Co.	
Electric Poultry Supplies	
Oakes Manufacturing Co.	
Insect Traps	
Folmer-Chapin Corp.	
Water Systems	
Myers & Bro. Co., F. E.	29
Ft. Wayne Eng. & Mfg. Co.	31
Roper Corp., Geo. D.	
Cullman Wheel Co.	29
Hot Water Heaters	
Edison G-E Appliance Co.	2
Malleable Iron Range Co.	5
Esco Cabinet Company	25
Churns	
Cherry-Burrell Corp.	
Dazey Churn & Mfg. Co.	
Clipping Machines	
Chicago Flexible Shaft Co.	
Dairy Utensil Sterilizers	
Malleable Iron Range Co.	5
Esco Cabinet Company	25
Bottle Washers	
Cherry-Burrell Corp.	
Electric Corn Poppers	
Excel Electric Co.	31
Electric Cookers	
Excel Electric Co.	31

For information about devices not included in the above list and the names of reliable manufacturers — use this handy coupon.

— — — — — — — — — — TEAR OFF HERE — — — — — — — — — —

ELECTRICITY ON THE FARM, 24 W. 40th St., New York

Without cost to me, please have manufacturers send complete information on the following Electrically Operated Equipment which I am thinking of buying:

....

....

My name is.....

Address .....

.....

I get my electricity from.....7-32

On the Air

(*Continued from page* 31)

contest; National Grange convention, Winston-Salem, North Carolina, November 19; and International Livestock Exposition during the first week of December. Additional features of equal importance are being planned for the Farm and Home broadcast.

• • •

Studio Chatter

NELLIE REVELL says Ohio may be the mother of presidents, but as far as radio entertainers are concerned Illinois is the whole family tree.

Gene and Glenn are both good fishermen. Not so good at catching, but excellent at fishing.

Edna Kellogg once received a pair of jewel studded turtles from an admirer.

Rex Dunn, orchestral conductor of San Francisco, claims to have a record memory for voices. Once, when he was living in Los Angeles, he phoned some friends, and a young woman answered the telephone. Rex said, "Hello, Frances," although he had not heard her voice for eleven years.

Frazier Hunt, radio interviewer, has been a sugar planter in Mexico, a country editor in Illinois, a reporter on a large daily, and was one of the **war's noted** correspondents.

Henry Ford is a jewsharp addict and, according to Dad Pickard of the Pickard family of entertainers, is the best player of the instrument in the country.

Care of Meat

(*Continued from page* 25)

deterred by cold. That is why the Bureau recommends keep uncooked meat at a temperature of 47 deg. F. or below.

"Unwrap the meat as soon as it is delivered," so their directions go, "and place it on a clean platter or dish in the coldest part

CARE of MEAT in the HOME
UNWRAP AS SOON AS DELIVERED
PLACE UNCOOKED MEAT IN UNCOVERED DISH. COVER LOOSELY IF AT ALL
COOKED MEAT CAN BEST BE STORED BY LOOSELY COVERING WITH OILED PAPER SO AS TO PREVENT TOO RAPID DRYING OUT
STORE UNCOOKED MEAT IN COLDER PORTION

of the refrigerator—next to the milk compartment.

"If you are afraid something might be spilled from the upper shelves on the meat, lay a loose sheet of waxed or parchment paper on top of it. Meat kept in a closed container or wrapped up completely in paper spoils faster than meat on an uncovered dish with air circulating about it.

"Cooked meat needs almost as cool a temperature as uncooked meat. It may be loosely covered with oiled paper to prevent it from drying out too rapidly. If there is any doubt about keeping a piece of meat for a day or more in the home refrigerator, it is safest to cook it at once and use it in a reheated form."

CLASSIFIED ADVERTISING

LYON IMPROVED BROODERS are proving under all climatic conditions the economy and greater value of electric brooding. Both Hover and Battery types. ELECTRIC ALARMS save time and money for the poultryman. Inexpensive Burglar, Power Off, Fire and Temperature Protection. HEATING and THERMOSTATIC SUPPLIES for Battery and Hover Brooders. Practical electric heating equipment for incubators. Send for Free Interesting Catalog, also book on Electric Brooding. LYON ELECTRIC COMPANY, Dept. E.F., 2075 Moore Street, San Diego, California.

CONTEST PAGE

Cash Prizes Awarded for Best Titles to Cover Pictures

First Prize for May

$25.00

**"Within the reach of all today,
Is pure food preserved the electric way."**

ROBERT W. TURNER,
R. 3, Coopersville, Mich.

The following have been awarded $5.00 cash prizes for their May titles:

"A keyhole yields a hot 'tip' on a quest for cold refreshments."
Lewis C. Bjerke,
R. 2, Weyerhauser, Wis.

"Anticipation and investigation,
Amply rewarded by electric refrigeration."
Edward M. Taylor,
R. 1, New Preston, Conn.

"Perfect food—once too high,
Now in reach."
Mrs. Louis Gowdy,
R. 1, Hazardville, Conn.

"The key to correct food preservation,
Is all year electrical refrigeration."
Mrs. Sara Ramsey,
Marshallton, Del.

"Safeguarding food for the kiddies today,
Is easily accomplished the electrical way."
Mrs. Frank Toohill,
Heyworth, Ill.

Rules for July Contest

There will be one first prize of $25.00 and five second prizes of $5.00 each. In case of a tie each winning contestant will receive the full cash prize to which he or she is entitled.

All members of the farm family to whom this magazine was sent are eligible. Each contestant may submit only one title.

Send your title on the coupon below or on a plain sheet of paper making out a similar form.

Question "A" must be answered correctly.

Entries must be sent to the Title Editor, ELECTRICITY ON THE FARM, 24 West 40th Street, New York, before August 1st.

Winning names and titles will be announced in the September issue.

My title for the July Front Cover Picture of ELECTRICITY ON THE FARM is.....

.....

.....

.....

.....

(a) When you want to know more about an electrical article you have seen advertised, which one of the following things do you do?

☐ Write the Manufacturer. ☐ Ask your local dealer. ☐ Ask the Power Company.

My name is.....R. F. D.....

Post Office..... County..... State.....7-33

Hay Hoist Operated by 5 Horsepower Motor

ELECTRIC MOTORS

For Harvest Help

YOU can save time, labor and money by using an electric motor for harvest help. A portable five horsepower motor will operate an ensilage cutter, hay hoist, grain elevator, roughage cutter—and do many other jobs—replacing one or more extra hands. Reduce harvest costs by using your electric power.

Write Our Rural Service Department or See Your Local Dealer for Full Information

NORTHERN INDIANA PUBLIC SERVICE COMPANY

356—G